DECEMBER 5.

Mr. VAUX, Viee-President, in the chair.

Forty-two members present.

The following papers were presented for publication:—

"Our Sidereal System and the Direction and Distance of its Centre." By JACOB ENNIS.

"On some Extinct Reptiles and Batrachia from the Fort Union and Fox Hills Beds of Montana." By Edw. D. Cope.

On Ozocerite.—Prof. LEIDY remarked that the fine collection of specimens of Ozocerite, and minerals with which it is found associated, presented this evening by Mr. Paul Dobel, through Dr. F. Migerka, the Austrian Commissioner, were well worthy the attention of the members. The Ozocerite, Erdwachs or mineral wax of the Germans, is found in association with clay, sand, and salt, at Boryslaw, in the Carpathians, Galieia. The collection consists of a fine series of the Ozocerite of different varieties: the ordinary brown but fibrous kind; a lemon-yellow flaky form; another lemon-yellow but fibrous kind; a black carbonaceous form, etc., with specimens associated with rock salt, and others with clay and sandstone. Besides these there are a number of specimens obtained from the crude material; a mass of chocolate-brown hue; another undistinguishable in appearance from ordinary yellow beeswax, and a third looking like white wax or like paraffine.

On Hyraceum.—Prof. Leidy remarked that the large, black bituminous-looking mass presented this evening, through Mr. H. C. Coates, Commissioner of the Colony of Cape of Good Hope, is the substance ealled Hyraceum, and is said to be the inspissated urine of the Hyrax capensis. The animal is reputed to inhabit gregariously, rocky places at the Cape of Good Hope. The accumulated urine in hollows of the rocks, gradually evaporating, is supposed to give rise to the product in question. It is reported as having been employed in medicine with the same effect as castoreum.

Prof. Cope remarked that a material resembling the concretion made by the urine of Hyrax was found in the fissures of the rocks in New Mexico. It was probably the fecal and renal deposit of the wild rat, *Neotoma*.

On Itacolumite.—Prof. W. P. BLAKE remarked that the Mineral Department of the National Museum at the Centennial Exhibition had recently received some specimens of flexible sandstone, re-

ported to be from Mariposa County, California, which are interesting and worthy of note by reason of the new locality, and as showing the peculiarities of this kind of sandstone in a marked degree. The specimens are, also, unusually fine, some being over thirty inches in length, and only two square inches in section. The color and the structure appear to be the same as in flexible sandstone from other localities. Thin and small scales of silver mica are abundant. It bends with little resistance up to a certain point, and without elasticity, but is rigid beyond that point. When held up by one end and shaken, the motion is transmitted in wave-like vibrations as in a cord, but the limit of movement is sensibly felt like a blow or shock. A specimen thirty-two inches in length may be bent seven and a half inches to one side or the other of a straight line. The freedom of movement is greatest at right angles to the plane of lamination. The specimens are also capable of being sensibly extended when pulled. In a specimen thirty-two inches long the extension amounted to about half an inch. No examinations under the microscope have been made, as they should have been, to show the structure. The freedom of movement up to a certain point, and the rigidity beyond that point indicate that there is a tolerably uniform distance between the grains of sand and a certain amount of movement possible among them, and that by bending, the grains are brought into eontact with each other. The theory of the late Prof. C. M. Wetherill that the grains of sand are shaped like dumb-bells was referred to with a doubt of its correctness. The part which the scales of mica play can only be shown by the examination under a microscope of carefully ground sections of the stone, which might perhaps be prepared for cutting by solutions of soluble glass.

Prof. Leidy stated that he had examined Itacolumite microscopically without being able to detect anything like the dumbbell structure described by Dr. Wetherill. He supposed that the intermingling of grains, differing in translucency and color, gave rise to the impression of a dumbbell arrangement. Thus a pair of adherent translucent grains surrounded with smaller colored

ones would give rise to such an impression.

DECEMBER 12.

The President, Dr. Ruschenberger, in the chair.

Forty-four members present.